thorax bluish green, legs piceous, abdomen black, the hind margins of the segments faintly reddish; hair of head and thorax scanty, white; labrum with yellowish hair; mandibles obscurely reddish in middle; apical half of flagellum ferruginous beneath; clypeus short, black, with sparse coarse punctures; supraclypeal area shining green, with a few punctures; front densely punctured; mesothorax shining, the disc with sparse, large punctures; scutellum shining; area of metathorax rugose; posterior truncation distinct; tegulæ dark reddish brown; wings hyaline, very faintly dusky, stigma and nervures reddish brown; hind spur with three teeth; abdomen shining, with only minute, indistinct punctures; no hair-bands, but the usual thin, pale hair.

Carcarana, Argentina (*Bruner* 39), U. S. National Museum. Related to *H. spinolæ* Reed (*paramario* Friese) and *H. danicorum* Ckll., but considerably larger. In the North American fauna it resembles *H. subconnexus* Ellis, but differs by the narrower face, more copiously punctured mesothorax, more dusky stigma, and rugose base of metathorax.

Augochlora argentina Friese.

Carcarana (*Bruner* 80). Agrees with a specimen received from Friese.

Augochlora (Odontochlora) phoenomoë (Schrottky).

Carcarana (*Bruner* 86).

Augochlora (Pseudaugochloropsis) callisto Smith.

Carcarana and Bahia Blanca (*Bruner* 8, 75).

A NEW HOPLIA FROM FLORIDA.*

BY W. S. FISHER, WASHINGTON, D. C.

Among a collection of Coleoptera submitted by Mr. H. L. Dozier for determination, the following interesting new species of Hoplia was found.

Hoplia floridana, n. sp.

Male.—Elongate, black, shining. Upper surface sparsely clothed with short, semi-erect lanceolate, hair-like cinereous scales. Head strongly rugose, sparsely clothed with short, erect hairs. Clypeus one-half wider than long, feebly reflexed in front, when viewed laterally, not in the same plane as rest of head, but

*Contribution from the Branch of Forest Insects, Bureau of Entomology.

April, 1918

obliquely truncate; sides nearly parallel, truncate in front with the angles rounded; surface flat with large, round punctures, clothed with inconspicuous, erect hairs. Clypeal suture prominent and strongly elevated. Prothorax one-half wider than long; sides oblique to just in front of middle, then strongly angulate and slightly concave to the posterior angles, which are rounded; front angles acute; apex broadly emarginate; base nearly truncate; disc strongly convex with the surface finely rugose and sparsely clothed with rather short, lanceolate, hair-like cinereous scales, with longer, erect hairs along the lateral margins. Elytra one-half longer than wide, slightly narrowed posteriorly, surface rather strongly rugose with only traces of costæ and clothed similar to the prothorax. Pygidium strongly narrowed posteriorly, surface densely, finely rugose and clothed with hair-like scales similar to those on the elytra. Beneath, sparsely clothed with hair-like scales as above. Posterior femora short and very much swollen. Anterior tibiæ with two large, well developed teeth. Posterior tibiæ greatly enlarged posteriorly, surface with large, round, confluent punctures. Claws of front and middle tarsi chelate and unequal, the outer one being larger and bifid at the tip. Hind tarsi with a single claw which is not cleft.

Length 10 mm.; width 4.5 mm.

Female.—Similar to male except as follows: Colour reddish brown, shining. Surface rather densely clothed with yellow, nearly round scales, with a few semi-erect, short, lanceolate, hair-like scales of the same colour, the scales not being abundant enough to obscure the colour of the elytra.

Length 9 mm.; width 4mm.

Habitat.—Lake Wales, Florida.

Holotype (male), allotype and paratype (female) in the U. S. National Museum Collection; also two paratypes (male and female) in the collection of the Florida Agricultural Experiment Station at Gainesville, Florida.

Described from five specimens, two males and three females, received from Mr. H. L. Dozier and labeled "Agric. Exp. Station, Lake Wales, Florida, Ec. No. 219 & 220, J. R. W." In a letter from Mr. Dozier he states that "These specimens were collected April 7, 1917, with a report that they were feeding on citrus foliage."

This interesting species is easily distinguished from any other North American species by its peculiar clypeus, which is obliquely truncate in front of the clypeal suture, the latter being strongly elevated, and also by the greatly swollen posterior femora and enlarged tibiæ.

BOOK NOTICE.

THE BIOLOGY OF DRAGONFLIES (ODONATA OR PARANEUROPTERA).—By R. J. Tillyard, M.A., (Cantab.) B.Sc. (Sydney), F.L.S., F.E.S. Cambridge, The University Press, 1917. $4.50.

Since the publication in 1893 of Dr. Calvert's excellent "Catalogue of the Odonata of Philadelphia, with an Introduction to the Study of this Group of Insects," no general treatise on the biology of the dragonflies has appeared, and as Dr. Calvert's work is now long out of print and necessarily somewhat out of date, such a treatise has been much needed. Mr. Tillyard's book fills this need admirably. He has aimed "to present as full and complete an account of the biology of the Odonata as it is possible to offer in the present state of our knowledge of these insects," and he has spared no pains in carrying out this object. Every chapter bears the imprint of a thorough assimilation and careful sifting of the available data and a great deal of new matter has been added from the author's own extensive researches in many branches of the subject. With this wealth of material is combined a clearness and directness of diction, which, with the abundance of good illustrations and full glossary of technical terms should enable any biologist to follow the text without difficulty. A charm of novelty is added by the author's familiarity with the Australian fauna, from which he draws a large number of examples, in illustration of the various phenomena described.

Of the nineteen chapters ten are devoted chiefly to anatomical matters, including those on the external features, the wings, the larva or nymph, and the various organic systems. These are followed by chapters on a variety of subjects; embryology, coloration, classification, zoogeographical distribution, the geological record and bionomics; the last-named including a miscellaneous collection of facts, relating to habits, food, enemies, economic value, etc.